

REMARKS

Claims 1, 2, 7, and 10-13 are pending in the Application. The specification has been amended. Claim 1 has been amended. Support for the amendments can be found in the specification as originally filed. No new matter has been added.

OBJECTIONS

The specification is objected to. The rejection should be withdrawn in view of the amendment above and remarks below.

Table 1, Example 1 has been amended to include subject matter inadvertently omitted. Reconsideration is requested.

Regarding the nature of the components used in working and comparative examples, product brochures published before the invention showing comparative examples are being submitted herewith in Appendix 1. The product brochures include a safety data sheet of the NAPVIS Polybutenes and a material safety data sheet of Blendex WX 270 are enclosed. Both are issued prior the date of the present invention. The MSDS of Blendex WX 270, received by FAX transmission on October 18, 1999, discloses under "Product Description" that the polymer is a Acrylonitrile-EPDM-Styrene terpolymer (CAS# 32505-24-1). The safety data sheet of the NAPVIS Polybutenes, issued November 2, 2000 (page 5, chapter 16), discloses for all types of NAPVIS listed under chapter 16 (page 6) that the nature of these additives is polyisobutylene (page 1, chapter 2). Reconsideration is requested.

Regarding Claim 7, line 2 the claim should include "is" as provided in the Claim 7 as originally filed. Reconsideration is requested.

REJECTIONS UNDER 112

Claims 1, 2, 7 and 10-13 stand rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter. The rejection should be withdrawn in view of the amendment above and remarks below.

Claim 1 has been amended to include an average molecular weight. Claim 2, 7 and 10-13 depend from Claim 1, which as discussed is believed to be

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allowable. Reconsideration of the rejections is requested.

REJECTIONS UNDER 103

1. Claims 1, 2, 7 and 10-13 stand rejected under 35 USC 103 as being obvious in view of Fujita et al and Katayama et al. The rejection should be withdrawn in view of the remarks below.

The Office Action alleges that:

"The instant invention further recites low molecular weight additive (processing aid), flame retardant and mineral filler over Fujita et al. However, the use of processing aid such as stearic acid triglyceride, flame retardant and mineral filler in a blend of polycarbonate and rubbery polymer is well known as taught by Katayama et al, col. 6, line 24 to col. 18, line 24. Said flame retardant and mineral filler would provide flame retardancy and improved physical properties, respectively, for a polymeric composition. Also, said processing aid such as stearic acid triglyceride would provide an easier molding process.

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known processing aid such as stearic acid triglyceride, and flame retardant or mineral filler of Katayama et al in Fujita et al since the use of said additives in polymeric compositions in order to provide an easier molding process, flame retardancy and improved physical properties, respectively, and since such practice is a routine in the art absent showing otherwise."

Claim 1 has been amended thermoplastic molding composition containing an acrylonitrile/ethylene α -olefine rubber/styrene graft polymer and an amount of polybutenes and polyisobutenes having a weight average molecular weight of 600 to 10000 sufficient to increase the "Δsoft phase" value of the composition; and containing at least one member selected from the group consisting of polycarbonate, polyamide, polyalkylene terephthalate and (co)polymers of vinyl aromatic monomers.

However, neither Fujita et al alone or in combination with Katayama not teach or suggest the use of polybutenes and polyisobutenes having a weight average molecular weight of 600 to 10,000 as additives to thermoplastic molding composition. Reconsideration is requested.

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Claims 2, 7, and 10-13 depend from Claim 1, which as discussed is believed to be allowable. Thus, Claims 2, 7, and 10-13 are also believed to be allowable. Reconsideration of the rejection of the claims is requested.

2. Claims 1, 2, 7 and 10-13 stand rejected under 35 USC 103 as being obvious in view of Fujita et al and Medsker et al. The rejection should be withdrawn in view of the remarks below.

The Office Action alleges that:

"The instant invention further recites low molecular weight additive (polybutene oil), flame retardant and mineral filler over Fujita et al. However, the use of processing aid such as polybutene oil, flame retardant and mineral filler in a blend of polycarbonate and rubbery polymer is well known as taught by Medsker et al, col. 7, lines 40-57 and col. 11, lines 30-31.

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known processing aid such as polybutene oil, and flame retardant or mineral filler of Medsker et al in Fujita et al since the use of said additives in polymeric compositions in order to provide an easier molding process, flame retardancy and improved physical properties, respectively, and since such practice is a routine in the art absent showing otherwise."

However, Medsker et al disclose a process for thermoplastic vulcanizate compositions prepared using hydrosilylation crosslinking of the rubber component of the composition. Medsker et al teach that the type of rubber or processing oils (e.g. polybutenes according to col. 11, line 30 - 31) in thermoplastic elastomers will be that ordinarily used in conjunction with the specific rubber or rubbers present in the composition (col. 8, line 39 - 46). Medsker et al disclose as thermoplastic resins crystalline polyolefin homopolymers and copolymers (col. 4, lines 8 - 11). Medsker et al does not teach or suggest to use polybutenes and polyisobutenes having a weight average molecular weight of 600 to 10000 as additives to thermoplastic molding composition which contain at least one member selected from the group consisting of polycarbonate, polyamide, polyalkylene terephthalate and (co)polymers of vinyl aromatic monomers in order to improve toughness at low

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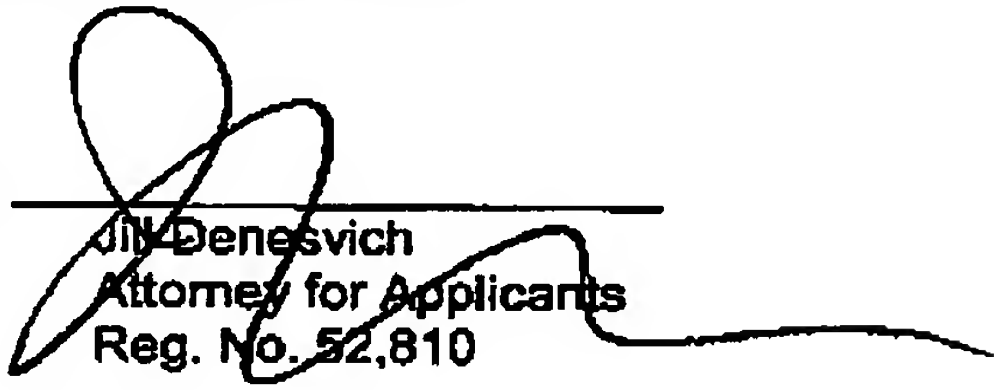
temperatures without substantially changing the melt volume rate.

Further, there is no motivation to combine the teaching of Medsker et al with Fujita et al because the compositions of Medsker et al do not teach or suggest the use of polycarbonate. In contrast, compositions according to the invention of Fujita et al do always contain polycarbonate. Thus, one skilled in the art would not be motivated to use an additive as described in an invention concerning vulcanization of rubber in a thermoplastic resin composition comprising polycarbonate in order to improve toughness at low temperatures without substantially changing the melt volume rate.

In view of the above amendments, Applicants submit that the claims are in condition for allowance and the Examiner would be justified in allowing them.

Respectfully submitted,

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